

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/743,391  
Source: JFWO  
Date Processed by STIC: 09/14/2005

# ***ENTERED***



IFWO

**RAW SEQUENCE LISTING**

DATE: 09/14/2005

PATENT APPLICATION: US/10/743,391

TIME: 09:26:06

Input Set : A:\10 743,391.txt

Output Set: N:\CRF4\09142005\J743391.raw

3 <110> APPLICANT: Hurst, Timothy  
 5 <120> TITLE OF INVENTION: MUTANT FORMS OF EtxB AND CtxB AND THEIR USE AS CARRIERS  
 7 <130> FILE REFERENCE: P011729US  
 9 <140> CURRENT APPLICATION NUMBER: US 10/743,391  
 C--> 10 <141> **CURRENT FILING DATE: 2003-12-22**  
 12 <150> PRIOR APPLICATION NUMBER: GB 01153824  
 13 <151> PRIOR FILING DATE: 2001-06-22  
 15 <160> NUMBER OF SEQ ID NOS: 10  
 17 <170> SOFTWARE: PatentIn version 3.3  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 8  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Escherichia coli and Vibrio cholerae  
 25 <220> FEATURE:  
 26 <221> NAME/KEY: MUTAGEN  
 27 <222> LOCATION: (1)..(8)  
 28 <223> OTHER INFORMATION: Sites 1-8 can be mutated to any amino acid.  
 30 <400> SEQUENCE: 1  
 32 Glu Val Pro Gly Ser Gln His Ile  
 33 1 5  
 36 <210> SEQ ID NO: 2  
 37 <211> LENGTH: 8  
 38 <212> TYPE: PRT  
 39 <213> ORGANISM: Escherichia coli and Vibrio cholerae  
 42 <220> FEATURE:  
 43 <221> NAME/KEY: MUTAGEN  
 44 <222> LOCATION: (1)..(1)  
 45 <223> OTHER INFORMATION: Can be any amino acid.  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: MUTAGEN  
 49 <222> LOCATION: (6)..(6)  
 50 <223> OTHER INFORMATION: Can be any amino acid.  
 52 <220> FEATURE:  
 53 <221> NAME/KEY: MUTAGEN  
 54 <222> LOCATION: (7)..(7)  
 55 <223> OTHER INFORMATION: Can be any amino acid.  
 57 <400> SEQUENCE: 2  
 59 Glu Val Pro Gly Ser Gln His Ile  
 60 1 5  
 63 <210> SEQ ID NO: 3  
 64 <211> LENGTH: 8  
 65 <212> TYPE: PRT  
 66 <213> ORGANISM: Escherichia coli and Vibrio cholerae

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69 <220> FEATURE:
70 <221> NAME/KEY: MUTAGEN
71 <222> LOCATION: (7)..(7)
72 <223> OTHER INFORMATION: Ala or Ser
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77 1          5
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81 <211> LENGTH: 8
82 <212> TYPE: PRT
83 <213> ORGANISM: Artificial
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Synthetic peptide
88 <400> SEQUENCE: 4
90 Ser Ile Ile Asn Phe Glu Lys Leu
91 1          5
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 9
96 <212> TYPE: PRT
97 <213> ORGANISM: Artificial
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Synthetic peptide
102 <400> SEQUENCE: 5
104 Cys Ser Ile Ile Asn Phe Glu Lys Leu
105 1          5
108 <210> SEQ ID NO: 6
109 <211> LENGTH: 16
110 <212> TYPE: PRT
111 <213> ORGANISM: Artificial
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Synthetic peptide
116 <400> SEQUENCE: 6
118 Cys Glu Lys Leu Ala Gly Phe Gly Ser Ile Ile Asn Phe Glu Lys Leu
119 1          5          10          15
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123 <211> LENGTH: 19
124 <212> TYPE: PRT
125 <213> ORGANISM: Artificial
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Synthetic peptide
130 <400> SEQUENCE: 7
132 Cys Ala Val Gly Ala Gly Ala Thr Ala Glu Glu Ser Ile Ile Asn Phe
133 1          5          10          15
136 Glu Lys Leu
140 <210> SEQ ID NO: 8
141 <211> LENGTH: 26
142 <212> TYPE: PRT
143 <213> ORGANISM: Artificial
145 <220> FEATURE:

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146 &lt;223&gt; OTHER INFORMATION: Synthetic peptide

148 &lt;400&gt; SEQUENCE: 8

150 Cys Glu Lys Leu Ala Gly Phe Gly Ala Val Gly Ala Gly Ala Thr Ala

151 1 5 10 15

154 Glu Glu Ser Ile Ile Asn Phe Glu Lys Leu

155 20 25

158 &lt;210&gt; SEQ ID NO: 9

159 &lt;211&gt; LENGTH: 26

160 &lt;212&gt; TYPE: PRT

161 &lt;213&gt; ORGANISM: Artificial

163 &lt;220&gt; FEATURE:

164 &lt;223&gt; OTHER INFORMATION: Synthetic peptide

166 &lt;400&gt; SEQUENCE: 9

168 Cys Glu Lys Leu Ala Gly Phe Gly Ala Arg Gly Ala Gly Ala Thr Ala

169 1 5 10 15

172 Glu Glu Ser Ile Ile Asn Phe Glu Lys Leu

173 20 25

176 &lt;210&gt; SEQ ID NO: 10

177 &lt;211&gt; LENGTH: 31

178 &lt;212&gt; TYPE: PRT

179 &lt;213&gt; ORGANISM: Artificial

181 &lt;220&gt; FEATURE:

182 &lt;223&gt; OTHER INFORMATION: Synthetic peptide

184 &lt;400&gt; SEQUENCE: 10

186 Cys Glu Lys Leu Ala Gly Phe Gly Ala Val Gly Ala Gly Ala Thr Ala

187 1 5 10 15

190 Glu Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr Glu Trp Thr Ser

191 20 25 30

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/743,391

DATE: 09/14/2005  
TIME: 09:26:07

Input Set : A:\10 743,391.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:4,5,6,7,8,9,10

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/743,391

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Input Set : A:\10 743,391.txt

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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date